

```

=> s bandwidth# or throughput#
      53922 BANDWIDTH#
      41201 THROUGHPUT#
L1      90855 BANDWIDTH# OR THROUGHPUT#
=> s priority or priorities or weight#
      45106 PRIORITY
      5423 PRIORITIES
      792832 WEIGHT#
L2      827668 PRIORITY OR PRIORITIES OR WEIGHT#
=> s 395/200.56 /cclst
L3      167 395/200.56 /CCLST
=> s l1 and l3
L4      52 L1 AND L3
=> s l4 and l2
L5      23 L4 AND L2
=> d ti,ab l-
=> d his

      (FILE 'USPAT' ENTERED AT 11:42:36 ON 28 FEB 1999)
L1      90855 S BANDWIDTH# OR THROUGHPUT#
L2      827668 S PRIORITY OR PRIORITIES OR WEIGHT#
L3      167 S 395/200.56 /CCLST
L4      52 S L1 AND L3
L5      23 S L4 AND L2
=> s l4 /ti,ab
      914 BANDWIDTH#/TI
      5283 BANDWIDTH#/AB
      238 THROUGHPUT#/TI
      2172 THROUGHPUT#/AB
      167 395/200.56 /CCLST
L6      11 ((BANDWIDTH#/TI,AB OR THROUGHPUT#/TI,AB) AND (395/200.56
/C
CLS
      T))
=> d ti,ab l-
=> d his

      (FILE 'USPAT' ENTERED AT 11:42:36 ON 28 FEB 1999)
L1      90855 S BANDWIDTH# OR THROUGHPUT#
L2      827668 S PRIORITY OR PRIORITIES OR WEIGHT#
L3      167 S 395/200.56 /CCLST
L4      52 S L1 AND L3
L5      23 S L4 AND L2

```

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L6           11 S L4 /TI,AB
=> s 370/468 /cclst

L7           419 370/468 /CCLST
=> s 17 and 11

L8           291 L7 AND L1
=> s 18 and 12

L9           144 L8 AND L2
=> s 19 /ti,ab

        419 370/468 /CCLST
        914 BANDWIDTH#/TI
        5283 BANDWIDTH#/AB
        238 THROUGHPUT#/TI
        2172 THROUGHPUT#/AB
        659 PRIORITY/TI
        3374 PRIORITY/AB
        29 PRIORITIES/TI
        297 PRIORITIES/AB
        4427 WEIGHT#/TI
        95506 WEIGHT#/AB
L10          11 (((370/468 /CCLST) AND (BANDWIDTH#/TI,AB OR
THROUGHPUT#/TI,
AB)) AND (PRIORITY/TI,AB OR PRIORITIES/TI,AB OR
WEIGHT#/TI,AB))
}

=> d ti,ab 1-

```

```
=> d his
```

```

(FILE 'USPAT' ENTERED AT 11:42:36 ON 28 FEB 1999)
L1           90855 S BANDWIDTH# OR THROUGHPUT#
L2           827668 S PRIORITY OR PRIORITIES OR WEIGHT#
L3           167 S 395/200.56 /CCLST
L4           52 S L1 AND L3
L5           23 S L4 AND L2
L6           11 S L4 /TI,AB
L7           419 S 370/468 /CCLST
L8           291 S L7 AND L1
L9           144 S L8 AND L2
L10          11 S L9 /TI,AB

=> s 370/477 /cclst

L11          259 370/477 /CCLST
=> s l11 and 11

L12          154 L11 AND L1

```

=> s 112 and 12

L13 50 L12 AND L2

=> s 113 /ti,ab

259 370/477 /CCLST  
914 BANDWIDTH#/TI  
5283 BANDWIDTH#/AB  
238 THROUGHPUT#/TI  
2172 THROUGHPUT#/AB  
659 PRIORITY/TI  
3374 PRIORITY/AB  
29 PRIORITIES/TI  
297 PRIORITIES/AB  
4427 WEIGHT#/TI  
95506 WEIGHT#/AB

L14 3 (((370/477 /CCLST) AND (BANDWIDTH#/TI,AB OR  
THROUGHPUT#/TI,  
AB)

) AND (PRIORITY/TI,AB OR PRIORITIES/TI,AB OR  
WEIGHT#/TI,AB)  
)

=> d ti,ab 1-

US PAT NO: 5,359,592 [IMAGE AVAILABLE] L14: 1 of 3  
TITLE: \*\*Bandwidth\*\* and congestion control for queue channels  
in  
a cell switching communication controller

ABSTRACT:

A mechanism for buffering communication cells in a communication controller, wherein a cell queuing circuit provides a cell loss \*\*priority\*\* mechanism, and wherein the cell queuing circuit determines service states for queue channels according to \*\*bandwidth\*\* allocation parameters. The service states includes a serve.sub.-- now state, a serve.sub.-- ok state, and a no.sub.-- serve state, such that a queue channel is in the serve.sub.-- now state if the queue channel must be serviced to maintain a minimum information rate parameter for the queue channel, the serve.sub.-- ok state if the queue channel can be serviced and not exceed a peak information rate parameter for the queue channel.

US PAT NO: 5,132,966 [IMAGE AVAILABLE] L14: 2 of 3  
TITLE: Call control with transmission \*\*priority\*\* in a packet communication network of an ATM type

ABSTRACT:

In a high-speed packet multiplex communication network including a transmission line with a predetermined \*\*bandwidth\*\* and accommodating a plurality of information sources, the sources having various packet delivery rates over a range of between a peak rate and a lower rate than an average rate and demanding various transport performances, the sources are preliminarily classified into a plurality of types according to transport performances required and different transmission \*\*priorities\*\*. \*\*Bandwidths\*\* of are assigned to the different types, respectively. \*\*Bandwidths\*\* of sources of first \*\*priority\*\* and second \*\*priority\*\* are determined

ones corresponding to the peak rate and the average rate, respectively. A virtual \*\*bandwidth\*\* may be calculated for the second \*\*priority\*\* source as a value between the peak and average rates. In response to connection requests from the sources, each of the connection requests is admitted when a \*\*bandwidth\*\* defined by the \*\*priority\*\* of each source is accepted in a residual \*\*bandwidth\*\* of the predetermined \*\*bandwidth\*\*, and the packets from the source of the first \*\*priority\*\* are preferentially transmitted to the transmission line, packets of the second \*\*priority\*\* source are transmitted when packets of the first \*\*priority\*\* source are absent. Thus, high \*\*bandwidth\*\* efficiency is insured while the high transport performance of the first \*\*priority\*\* source is maintained.

US PAT NO: 4,980,886 [IMAGE AVAILABLE] L14: 3 of 3  
TITLE: Communication system utilizing dynamically slotted information

ABSTRACT:

Burst switching apparatus for a hybrid switching and transmission system adapted to carry multimedia traffic components including voice and data in multi-slotted frames, in which components of the traffic to be transmitted from the sources thereof are assigned to respective selected slots in each frame to assure transmission of information generated by each active source within a predetermined \*\*bandwidth\*\*, and the \*\*bandwidth\*\* is reallocated as necessary to provide additional slots within each frame to the active sources on a frame-by-frame basis to accommodate the respective \*\*bandwidths\*\* required for the information generated by those sources from among the total available \*\*bandwidth\*\* of the system. The reallocation to provide additional slots is achieved by a combination of external control of \*\*bandwidth\*\* and dynamic allocation of \*\*bandwidth\*\*, by which the additional slots that are temporarily assigned to any active source are obtained from among those slots to which other sources have \*\*priority\*\*, on a frame-by-frame basis for only so long as the sources having \*\*priority\*\* to the temporarily assigned slots are inactive.

=> s bandwidth# or throuput#

53922 BANDWIDTH#  
9 THROUPUT#  
L1 53931 BANDWIDTH# OR THROUPUT#

=> del 11

DELETE L1? (Y)/N:y

=> s (allocat? or distribut? or divid? or control?) (2a) (bandwidth# or throughput#)

43759 ALLOCAT?  
489333 DISTRIBUT?  
511907 DIVID?  
1351700 CONTROL?  
53922 BANDWIDTH#  
41201 THROUPUT#  
L1 4865 (ALLOCAT? OR DISTRIBUT? OR DIVID? OR  
CONTROL?) (2A) (BANDWIDT  
H#

```

        OR THROUGHPUT#)

=> s priority or priorities or rank# or weight#

        45106 PRIORITY
        5423 PRIORITIES
        10982 RANK#
        792832 WEIGHT#
L2      832374 PRIORITY OR PRIORITIES OR RANK# OR WEIGHT#

=> s l1 and l2

L3      1849 L1 AND L2

=> s l3 /ti,ab

        775 ALLOCAT?/TI
        4083 ALLOCAT?/AB
        9267 DISTRIBUT?/TI
        51582 DISTRIBUT?/AB
        2780 DIVID?/TI
        46881 DIVID?/AB
        117695 CONTROL?/TI
        354651 CONTROL?/AB
        914 BANDWIDTH#/TI
        5283 BANDWIDTH#/AB
        238 THROUGHPUT#/TI
        2172 THROUGHPUT#/AB
        474 ((ALLOCAT?/TI,AB OR DISTRIBUT?/TI,AB OR DIVID?/TI,AB OR
CONT
ROL
        ?/TI,AB) (2A) (BANDWIDTH#/TI,AB OR THROUGHPUT#/TI,AB)
        659 PRIORITY/TI
        3374 PRIORITY/AB
        29 PRIORITIES/TI
        297 PRIORITIES/AB
        94 RANK#/TI
        714 RANK#/AB
        4427 WEIGHT#/TI
        95506 WEIGHT#/AB
L4      22 (((ALLOCAT?/TI,AB OR DISTRIBUT?/TI,AB OR DIVID?/TI,AB OR
CO
NTR
        OL?/TI,AB) (2A) (BANDWIDTH#/TI,AB OR THROUGHPUT#/TI,AB))
AND
(PR
        IORITY/TI,AB OR PRIORITIES/TI,AB OR RANK#/TI,AB OR
WEIGHT#/TI,
        AB))

=> d ti,ab l1

        (FILE 'USPAT' ENTERED AT 15:52:08 ON 28 FEB 1999)
L1      4865 S ((ALLOCAT? OR DISTRIBUT? OR DIVID? OR
CONTROL?) (2A) (BANDW
IDT
L2      832374 S PRIORITY OR PRIORITIES OR RANK# OR WEIGHT#
L3      1849 S L1 AND L2

```

L4                    22 S L3 /TI,AB

=> s server# (5a) 11

                  9982 SERVER#  
L5                    27 SERVER# (5A) L1

=> s 15 and 12

L6                    16 L5 AND L2

=> d ti,ab 1-  
=> d ti,kwic 5

=> s server#(5a) (allocat? or distribut? or divid? or arbit? or control?)  
(5a) (bandwidth# or throughput#)

                  9982 SERVER#  
                  43759 ALLOCAT?  
                  489333 DISTRIBUT?  
                  511907 DIVID?  
                  104813 ARBIT?  
                  1351700 CONTROL?  
                  53922 BANDWIDTH#  
                  41201 THROUGHPUT#  
L1                    38 SERVER#(5A) (ALLOCAT? OR DISTRIBUT? OR DIVID? OR ARBIT? OR  
C  
ONT  
                  ROL?) (5A) (BANDWIDTH# OR THROUGHPUT#)

=> s priority or priorities

                  45106 PRIORITY  
                  5423 PRIORITIES  
L2                    46119 PRIORITY OR PRIORITIES

=> s 11 and 12

L3                    17 L1 AND L2

=> d ti,ab,kwic 1-